

- Welcome once again, as MIT professor Paul Samuelson discusses the current economic scene. This series is produced by Instructional Dynamics Incorporated. Today we have some questions collected from some of the subscribers to this program. First, Professor Samuelson, would you put into perspective the Russian grain purchases? Are they really inflationary? This sounds a bit like a silly question, but recently I heard an authority cast some scorn on this view. He pointed out that people considered an increase in our import prices inflationary, in the case of oil. How, therefore he asked, if I understand him, can you in the same breath claim that increases in our exports are inflationary?

- Well, let me try to handle that question. It seems to me that the failure of the Russian grain crop, due to a rather unusual drought in Russia, is the basic cause for the Russian purchases from us. You know, Europe has had one of its most marvelous vacation summers in history. It was 96 in Stockholm not very long ago. I think the warmest that that city has ever recorded since 1811. And, this has taken its toll. The sugar beet crop is down by about 20% in the last couple of months, I'm informed. The Russians really do have a shortfall in their grain harvest. At first blush, I don't see why any economist should care to deny that a scarcity of goods somewhere in the world, other things being equal, does tend to increase the price of those staple goods, relative to other goods, and the way the price levels of the various countries in the world are in fact determined today, an increase in the prices of something basic, like food stuffs, it seems to me, is not going to be offset effectively by decreases in other prices, so that when you come to compute for the world as a whole an index number of all price items, I don't think you're gonna get neutrality. I think you're gonna get an increase. I might, at the same time, mention that there has been a definite deterioration in crop prospects in this country in the last month or so, and this has been reflected in the Struggle Board of Trade in grain prices. Once again, we have had a drought and very hot weather during the prime growing season for corn and for soybeans in Iowa. This followed a very good winter wheat crop, which came up to expectations, perhaps even exceeded expectations, but the Department of Agriculture has, at periodic intervals, been marking down its estimates of corn and soybeans. And, it seems to me that this is an exogenous factor, making me bet on a higher rate of increase in prices in the months ahead and in the quarters ahead. And it would take a very sophisticated argument indeed to disabuse me of my determination to bet, and I don't even think that a person who contrived a clever argument to the contrary would really put down his own money in betting against an increase in prices. Now, I wanna make clear that I'm not saying that there's no way of running the railroad so that a shortage of a basic domestic crop can be prevented from having an increase in the price level. Yes, by taking a very concerted compensatory action, the kind, by the way, which has no indication of being taken, you might offset this, but the point to make is that you have to take that action and it has to be offset. It will not be offset automatically by itself. Well, in the case of the Russians, the remarkable thing, and a number of people have commented on this, the remarkable thing is that when the Russians are short of grain, like they were two years ago, and as they apparently are now, they do not let their herds go down. If I were solving a planning problem, an optimal control planning problem, and the input of available grains, as an exogenous parameter of the problem, were reduced down, then the maximizing thing to do would be to cut down on herds. The Russians, apparently, have made a bureaucratic governmental decision to keep up their herds. Why? Well, it's been

suggested to me that they've made certain promises to their people about the new availability of meat. Meat is not available in the Soviet Union in the quantities and with the quality of meat in the States. Well, naturally, it's because they're a poorer country. How much poorer are they? Well, they're about, when you come to read the New Tenth Edition of my textbook, you'll see the result of a rather elaborate computation made by me, but with the assistance of Professor Abram Bergson of Harvard University, and utilizing all the information I could find, and I make out the real GNP of the Soviet Union to be about .48 of the United States, just below 1/2. I'm sorry, that's the real GNP per capita. Their real GNP has now moved above half of ours. We've been growing a little bit more slowly than they have. I may say these computations are made both in ruble prices and in dollar prices, and a suitable ideal index is taken between those numbers. They've moved to more than half of our GNP, but they still have more population than we have. We have about 212 million people and they have, I don't remember the number exactly, something like 250 million people. And when you make the correction for their excess in population, they move down to a little bit below us. I think that's misleading if you think of that as their having 48% of the consumption of ours. Think of a market basket of goods for us and then think of them as having the same market basket but with only a little less than half as much of each item. Of course, that's not the way it goes, because as you know, when you become twice as affluent, you don't spend it all on food in the same way, and certainly not the same kind of food. More of the Soviet Union goes into a larger fraction, I think, goes into defense security expenditures than is true for us. You might call this regrettable expenditure, unless you get a real kick out of the power expenditure for its own sake, or unless you think that it's regrettable but really very necessary. The amount of money I spend periodically for penicillin, I don't particularly enjoy munching the penicillin, but I think of it as some of the best money spent, and so you might feel, if that's your view of the world, that defense expenditures by us, or they might feel defense expenditures by them are among the most valuable of their expenditures. But if you were to take the amount of private consumption goods that come through at the family level, I guess you'd have to be Professor Bergson to write down the .48, but I think you'd have to write it down. But I made the point that they are poorer than we are. I'm told that you mustn't think of the Soviet Union as a government completely entrenched with no concern for public opinion. It is an entrenched government, and I don't think you oughta hold your breath waiting for meat riots and for those meat riots to lead to an overturn of that regime and a restoration of free private enterprise. Still, the bureaucracy does think it must take into account the wishes of the people. After all, that's true in the case of our bureaucracy, too, in a measure. And they seem to have come to a political decision that even though grain is scarcer, they will keep processing it in the expensive form of meat, and maybe their rationing system doesn't lend itself very conveniently to doling out extra scarcity by less meat. Now you might say, "What's so odd about that?" Well, I don't know whether it's odd or not, but it's very different from what happens in a capitalistic country. We have been, in the true Roman sense of the word, Latin sense of the word, we've been decimating our herds in this country, herds of cattle and herds of hogs. These are very variable in total. They're like elastic bands. And much of the meat that we've been getting has been range-fed meat. The marketplace is a very ruthless computer. Sometimes, not always, but often, it computes that optimal control solution and it doesn't ask any committee whether it'll have to be put into effect, it just puts into effect. C'est la guerre, that's the way the cookie crumbles of supply and demand. And the margins for processors shrink, and that's the signal, it's the carrot and the kick in the pants which causes a lot of chickens to die out or be aborted. You may remember during the early New Deal days, there was a lot of, I was gonna say crocodile tears, but you could call them little piggy tears being shed about the pigs that were being plowed under. Well, there

are abortions going on all the time out there on the farm, and this has come to pass in our affluent country, but it has not come to pass in the Soviet Union. Well, how do they pay for it? A variety of ways, they've been doing a little bit better with respect to oil because their rival sellers have been increasing the price of oil four to five fold. In addition, they've been paying out in gold. I don't know how reliable the various estimates and rumors are of sales of gold by the Soviet Union, but I don't see any way of reckoning analytically the effect of each such sale except to say that it does tend to bid up the price level outside the Soviet Union. It does this even in if, as is the case, we are not directly on the gold standard. Mind you, this could be offset, but there is no reason to believe that it will automatically be offset or that, by design, there will be the political will and wish to offset it. Now, it's true that as the Soviet Union buys more from us, I'm leaving out of the picture the announcement by Earl Butts, the Secretary of Agriculture that not until September will we let any further Soviet grain purchases take place, we'll take another look at the situation and the crop outlook then and make a decision then, let's forget that for the moment, but to the degree that the Soviet Union is buying a substantial amount of our crop than would otherwise have been the case if the weather had not been so bad, then, it seems to me, that that is inflationary. It's inflationary because it directly pumps income into us. Now, we're on a floating exchange rate, dirty floating. In some degree, the exchange rate will rise as induced by the Soviet purchases, and that rise in the exchange rate will, in some degree, tend to push the price pressure abroad. But this rise in the exchange rate as a result of extra Soviet imports from us is a reaction, it's a secondary reaction, it's less than the primary effect. And so, I don't see any way of reckoning it, if you actually draw the supply and demand diagrams and write down the equations and do the logical thinking, to say that the increase in our exports in a regime of floating exchange rates, where the importers abroad, the Soviet Union, have some assets, which are acceptable elsewhere in the world, it seems to me that that is, other things being equal, inflationary. Now, the questioner said to me, "How can that be inflationary if you say "that increasing the price of oil is inflationary?" I don't see the force of the paradox. I know that we astonish little children with the fact that I blow on my hands to make them warm and I blow on my soup to cool it off. It's not a paradox which will phase a professor of thermodynamics at MIT because he says, "Well, that's very simple. "The soup is very, very hot, "and your hands are very, very cold, "and your breath is in between those. "And so it's perfectly logical "that the breath cools off the soup and warms the hands, "just as if you plunge your cold hands "into the hot soup like ice cubes, "you will cool the soup and warm your hands "to a common temperature." No paradox, it'll stand up even for a moment's contemplation. Well, let's see whether there's any paradox on the oil prices. The case of increase in the oil prices, that presumably chokes off some of our physical imports. Far from that being the opposite, an increase in our exports, which deprives us of goods, compared to what we'd have otherwise have had, after all, our weather doesn't automatically improve just because the Soviet weather disimproves, so there's a reduction in the net supply of goods to the United States, incident to an increase in our exports. And there's a reduction in the net supply of goods to the United States, as a result of an increase in the price of the goods we have to import from abroad, namely oil from the OPEC countries. There would be a real paradox if what we were talking about was an increased determination to force physical sales of oil on us by the OPEC countries. If that were inflationary, and our sending wheat abroad was inflationary, that would indeed be a paradox, but there's no paradox because their sending us extra oil would be deflationary. However, that's not what anybody's talking about. They haven't, and won't until the oil cartel breaks up, in which case everybody will agree that that's a deflationary matter. What they are doing is cutting down on the availability of imports to us. So, now that I am thinking aloud on the problem, it seems to me that the Russian purchases do make for

an exogenous element, making for inflation, and a very bad thing, because it's going to complicate all of the policy problems of the recovery, and also, it's going to complicate the path of the recovery under any fixed policy mix. In addition, and I might as well go on, in addition, we have the decontrol of oil, which I think is just around the corner. I'm not privy to the Walter Mitty dreams of administration economists, but I think that I can figure out pretty closely what an administration economist is salivating about when I see him with his tongue more or less out and drops of saliva on his lips, because all I have to do is to put myself into his shoes, in his skin, and think the way he thinks. And it really would be rather amusing. In fact, it is amusing what is happening. Certainly, some of the administration economists, for a long time, have just hoped there would be an impasse in Congress and that the oil control program would just go off the books. They were perfectly prepared, nee eager, when that happened to reduce the tariff, so as to cushion the immediate incidents of any increase in gasoline prices and fuel, oil. Well, in the meantime, surprising as it may seem, we still have courts in this land and law and who would've thought that the Court of Appeals would listen with favor to the constitutional argument made by the Attorney General of Massachusetts, Francis Bellotti, and the cabal of New England and eastern governors led by Governor Dukakis of my home state, and perhaps listened to the economic brief prepared by Professor Wassily Leontief, my old teacher, saying that the tariff program was being beastly to New England and that it was unconstitutional. Well, the US Circuit Court of Appeals has so held, and it's really rather handsome of President Ford that he has let it be known that he's willing to let the tariff go when oil is decontrolled. It's not clear that he has the tariff to let it go. I would presume, as a matter of good procedure, well let me call it procedure, that the president will appeal the decision just so as to keep his armory shining. But up to the moment that I speak, President Ford has not actually said that. His press secretary has said it but he has not said it. Well, I would suppose that as I talk now, as we're getting towards the end of August, that we oughta bet that decontrol will be a de facto thing. Now what will be the effect of that? It will raise the price of gasoline by some pennies. Some people say seven cents, some people say, "Well, if you make it seven cents, ten cents," but subtract the effect of the two dollar tariff, "then you're left with three or four cents." Some people say it'll be like the air hard miracle in Germany in 1948, '49, when the moment prices were set free, suddenly vegetables appeared in the markets, the wheels of industry turned over, it was a veritable miracle. Anything is possible in economics, but I don't think you oughta bet this time on a veritable miracle. As a matter of fact, there are only 12 people who understand Einstein's theory of general relativity, and 10 of them are supposed to be German. Well, there are only about 12 people who understand the entitlement system, and I think 11 1/2 of them are in Washington. But as I'm informed, the actual effect of the entitlement system, now in August, before it goes off the board, is that every time you find a gallon of new oil, it's worth \$18 to you. The notion that the present entitlement system is killing off the incentive to find new oil is a reverse of the truth, because you not only get the unregulated price, the free price as that's been affected for new oil by the shortage induced by the tariff, but you, in fact, get some brownie points, which are worth cash on the barrel head, and there isn't any doubt that the end of the control program is going to reduce the incentive in the short run to find new oil, because it's going to reduce the price. And I happen to believe in supply and demand, and I believe in marginal costs, and I believe in the way people react to economic incentives. And I think when the price goes down from \$18 a barrel for new oil to something like, I don't know, whether it be 12 or \$13, that's going, if anything, to reduce the incentives. What about the old oil? Well, I think that I can find for you some examples. I know I can find some anecdotes of some old oil, which is being held in because it only gets \$5 and there are certain things that could be done to that old oil which would add extra gallons, but at \$5.50, it

doesn't pay. And so there isn't any doubt that in that area, when that goes up to \$12, if we have a common level for the ocean, you will get some extra incentives; however, as I talk to people from Texas and to energy experts, it's even hard to get good anecdotes on the amount of old oil that is being bottled up. It's better, with respect to gas, but even there, the story is spoiled by the fact that there is a good auction market within the state of Texas for intrastate gas, and the main thing is that we're simply using gas as BTUs in Texas, whereas gas is a better material than simple BTUs. I conclude from this that we may have some good news awaiting us, because there has been, as a result of the recession, a reduction in the trim rate of advance of energy use, so that quite a number of members of the oil cartel are not able to sell all the oil they want. And they may begin to chisel, and we may get some breakdown in the morale of the cartel with some good results in terms of effective price, secret, cutting below list and so forth, for us. But you're not going to get it from the decontrol program in the short run, so I wouldn't really bet upon any miracle that this is actually going to bring down the price. I've only a couple of minutes left so since the question has had to do on the inflation front, let me record the fact that people have been becoming less sanguine, less optimistic, about a continued downward march in the rate of inflation. I don't think that this is because the underlying stock of money has moved in the last year, which is the relevant consideration, I think, remarkably upward. On the contrary, when you average out a springtime bulge in the rate of growth of the money supply, you find, looking back a full year, that there's been a rather modest, certainly modest in compared to the exogenous increase in prices. But what you've had is a worsening of the food price situation, a impending worsening of the energy situation. This is feeding itself into inflationary expectations in the money market and showing itself in higher interest rates, which also feeds into, for example, the cost of living through mortgage service and so forth. And, therefore, those people who have been betting that by the fourth quarter of the year, we would be down to about 3% price increase, I think are beginning to go back to Las Vegas to try to hedge those bets.

- If you have any other questions for Professor Samuelson, address them to Instructional Dynamics Incorporated, 450 East Ohio Street, Chicago, Illinois, 60611.